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DATE MAILED: 01/23/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---------------------------------------|---------------|----------------------|---------------------|-----------------|
| 10/067,151 | 01/29/2002 | Charle' R. Rupp | STRE-003/01US | 4814 |
| 22830 75 | 90 01/23/2004 | | EXAMINER | |
| CARR & FER | | | DO, THE | UAN V |
| 2200 GENG ROAD PALO ALTO, CA 94303 | | | ART UNIT | PAPER NUMBER |
| 2021 3, | | | 2825 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|--|---|----|--|--|--|
| | 10/067,151 | RUPP ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Thuan Do | 2825 | | | | |
| The MAILING DATE of this communication apperiod for Reply | ppears on the cover sheet | with the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPITHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the mailinearned patent term adjustment. See 37 CFR 1.704(b). Status | .136(a). In no event, however, may ply within the statutory minimum of d will apply and will expire SIX (6) N te, cause the application to become | a reply be timely filed thirty (30) days will be considered timely. ONTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133). | ı. | | | |
| 1) Responsive to communication(s) filed on <u>04</u> | December 2003. | | | | | |
| | s action is non-final. | | | | | |
| Since this application is in condition for allow closed in accordance with the practice under | ance except for formal m | | | | | |
| Disposition of Claims | • | , | | | | |
| 4)⊠ Claim(s) <u>1-17 and 19-29</u> is/are pending in the | e application. | | | | | |
| 4a) Of the above claim(s) 18 is/are withdrawn | * * | | | | | |
| 5)⊠ Claim(s) <u>15,17 and 19-29</u> is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-14 and 16</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/ | or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examin | ner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the E | Examiner. Note the attacl | ned Office Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreigna) ☐ All b) ☐ Some * c) ☐ None of: | | C. § 119(a)-(d) or (f). | | | | |
| 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Burea | nts have been received ir ority documents have be | • • | | | | |
| * See the attached detailed Office action for a lis 13) Acknowledgment is made of a claim for domes since a specific reference was included in the fi 37 CFR 1.78. | itic priority under 35 U.S. irst sentence of the speci | C. § 119(e) (to a provisional application or in an Application Data She | | | | |
| a) The translation of the foreign language pr | | | | | | |
| 14) Acknowledgment is made of a claim for domes reference was included in the first sentence of t | | • • | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Intervie | w Summary (PTO-413) Paper No(s) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice | of Informal Patent Application (PTO-152) | | | | |

U.S. Patent and Trademark Office

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and

DETAILED ACTION

1. This non-final office action is in response to amendment entered on 12/04/2003. Claims 1-17,19-29 remain pending in the application. Claim 18 is canceled.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being unpatentable over Kornachuck, Pat. No. 6,044,481.

Regarding claim 1: Kornachuck teaches a method comprising:

identifying a programmable logic core (col. 3, lines 10-30);

identifying an application (col. 1, lines 25-40);

designing an application specific circuit for the application (col. 1, lines 25-40);

integrating a programmable logic core into the designed application specific circuit (col. 4, lines 12-28).

Regarding claim 2: Dave teaches a method comprising:

identifying a programmable logic core for the integrated circuit (col. 1, lines 19-22);

establishing a set of timing constraints associated with the programmable logic core (col. 8, lines 20-34 for timing constraints and col. 1, lines 19-22 for programmable logic core); and

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controlling the design of application specific circuit that interfaces with the programmable logic core in the integrated circuit (col. 3, lines 42-60).

Regarding claims 3,4: These claims teach the method similar to the claim 1 and rejected in the same rationale except a sign-off design is rejected by column 2, lines 63-67.

Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 103 that form the basis for the rejections under this section made in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kornachuck, Pat. No. 6,044,481 in view of Sawave et al., Pat. No. 5,426,744.

Regarding claim 5: Kornachuck teaches an integrated circuit including:

a programmable multi-scale array (**Sawave** in col. 30, lines 41-49 where the arithmetic information are incorporated in the array memory to perform multi-scale array);

an application circuit interface (col. 4, lines 12-28) for providing a signal interface between the programmable multi-scale array and the application specific circuitry (**Sawave** in col. 30, lines 41-49); and

a programmable logic core adapter (col. 4, lines 12-28) that configures the programmable multi-scale array (**Sawave** in col. 30, lines 41-49).

However, Kornachuck does not teach multi-scale array. **Sawave** teaches this feature in col. 30, lines 41-49.

It would have been obvious to one of ordinary skill in the integrated circuit design art at the time of the invention to have combined the teaching of **Sawave** into Kornachuck to have multi-scale array because multi-scale array as taught by **Sawave** would have provided a flexible memory design to interface to other circuits.

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Regarding claim 6: This claim teaches well known features to support claim 5 and rejected in the similar manner.

Regarding claims 7-14: These claims teach well known features to support claim 4 or 5 and rejected in the similar manner.

Regarding claim 16: This claim teaches a similar circuit of claim 1 and rejected in the same rationale.

Allowable Subject Matter

Claims 15,17,19-29 allowed. The reason is the prior art does not teach all features of the independent claims.

Response to Arguments

3. Applicant's arguments have been considered and persuasive. New ground rejection in introduced by the prior arts of Kornachuck and Sawave in above section.

CONTACT INFORMATION

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 703-305-2362. The examiner can normally be reached on Monday-Friday 8:30-5:30 (except 2nd Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703305-3431 for regular communications and 703-305-3431 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.

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Thuan Do

Patent examiner

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1/13/04